MXD50

INSTALLATION/OWNERS MANUAL

AM/FM/CD Marine Receiver

MARINE

Preparation

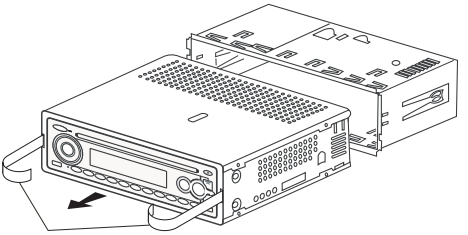
Please read entire manual before installation.

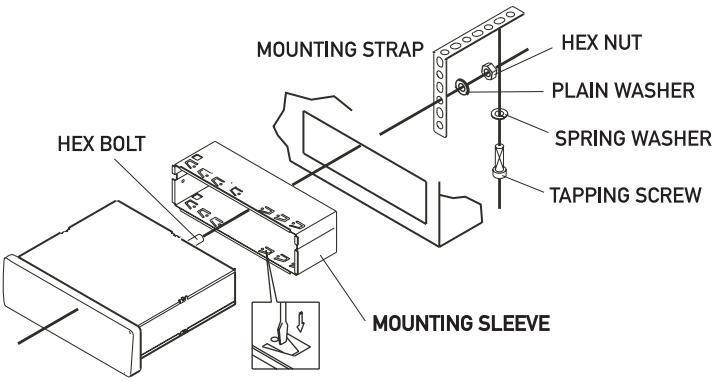
Before You Start

- Disconnect negative battery terminal. (consult a qualified technician for instructions)
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

Getting Started

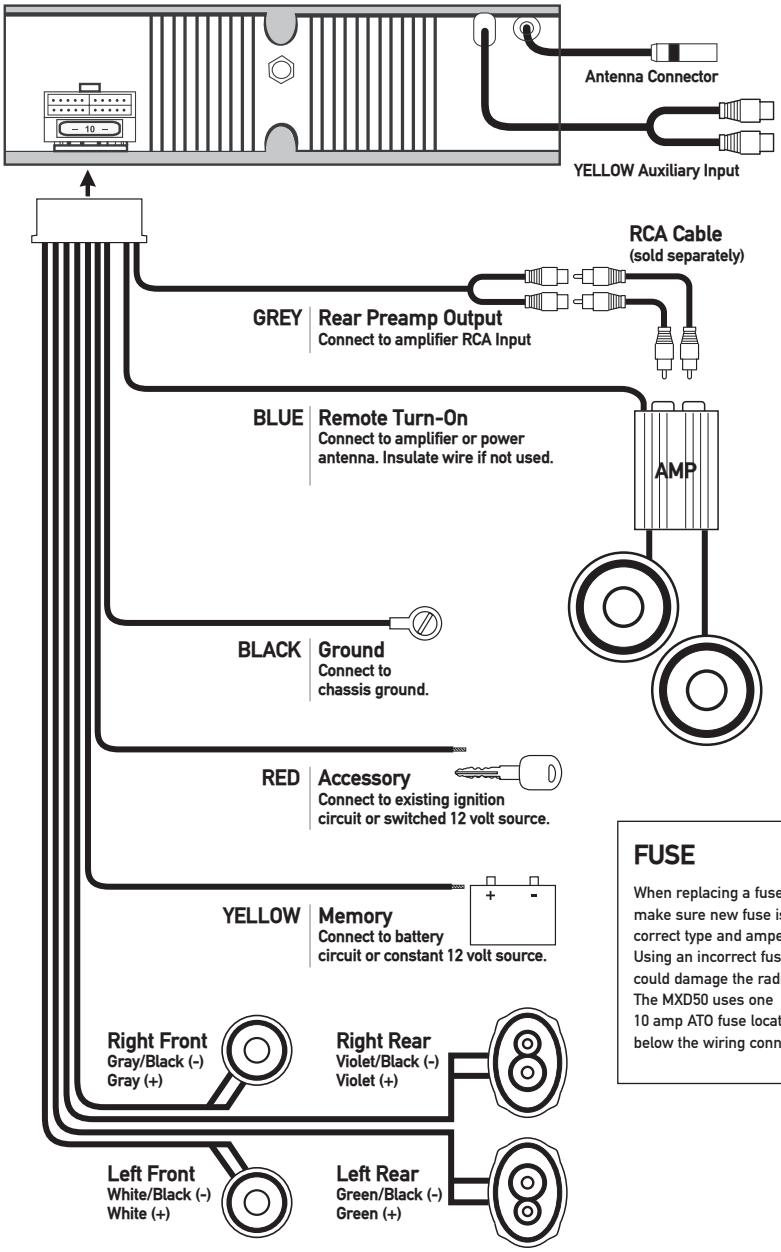
- Remove 2 transit screws located on top of the unit.
- Insert the supplied keys into the slots as shown, and slide the unit out of the mounting sleeve.
- Install mounting sleeve into opening, bending tabs to secure.
- Connect wiring harness and antenna. (consult a qualified technician if you are unsure).
- Test for correct operation and slide into mounting sleeve to secure.





TYPICAL MOUNTING METHOD

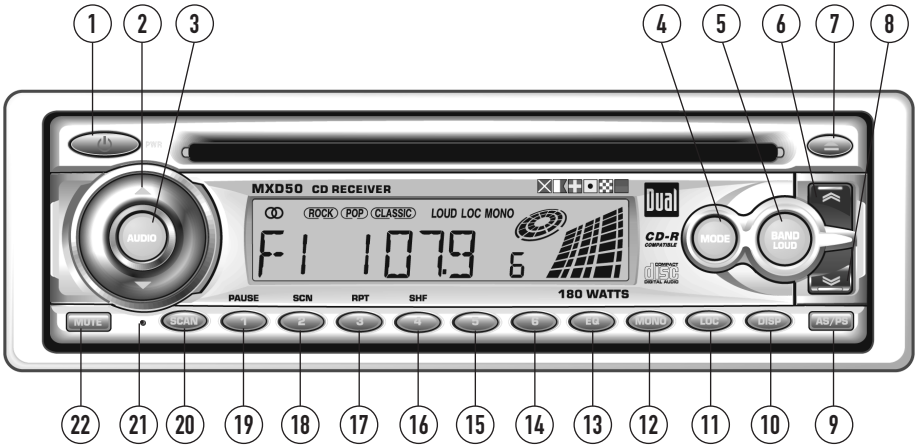
Wiring Diagram



FUSE

When replacing a fuse, make sure new fuse is the correct type and amperage. Using an incorrect fuse could damage the radio. The MXD50 uses one 10 amp ATO fuse located below the wiring connector.

Control Locations



1. Power
2. Volume
3. Audio
4. Mode
5. Band/Loud
6. Tune/Track Up
7. Eject
8. Tune/Track Down
9. Auto Store/Preset Scan
10. Display
11. Local/Distance
12. Mono/Stereo
13. EQ
14. Preset 6
15. Preset 5
16. Preset 4/CD Shuffle
17. Preset 3/CD Repeat
18. Preset 2/CD Scan
19. Preset 1/CD Pause
20. Tuner Scan
21. Reset
22. Mute

General Operation

Power On/Off	Press **PWR** or any other button (except eject) to turn the unit on. Inserting a CD will turn the unit on automatically. Press **PWR** to turn the unit off.
Mode	Press **MODE** to select between tuner, CD player and auxiliary input. Modes of operation are indicated in the display.
Loudness	Press and hold **LOUD** for more than 2 seconds to activate and deactivate the loudness contour curve. Activating this feature will enhance the bass and treble frequencies when listening to music at low volumes.
Volume	Adjust volume using **VOL ▲** or **VOL ▼** (00-100).
Mute	Press **MUTE** to silence the audio. Press any button to cancel.
Preset EQ Curves	Press **EQ** to select between FLAT, CLASSICS, POP, ROCK and DSP OFF (default) equalization curves. FLAT indicates no audio enhancement. Any adjustment to the Bass or Treble settings automatically cancels the current EQ curve.
Display	Press **DISP** to display the clock. The radio frequency (tuner mode) or CD track/elapsed time (CD player mode) show by default.
Set the Clock	With the unit on, press **DISP** to display the clock, then release. Press and hold **DISP** until the clock begins to flash, then release. Press **TUNE** ⩔ to adjust the hours and **TUNE** ⩒ to adjust the minutes. Press **DISP** momentarily to save the selected time.

General Operation

Reset

Press and hold for more than 2 seconds to **RESET** the unit upon initial installation, when selecting between US/European frequency spacing or if abnormal operation occurs.

Audio

Press **AUDIO** to select between Volume (default), Bass, Treble, Balance & Fader.

Bass

Press **AUDIO** until **BAS** appears
Press **VOLUME** ▲ or ▼ to adjust
(+10 maximum / -10 minimum)

Treble

Press **AUDIO** until **TRB** appears
Press **VOLUME** ▲ or ▼ to adjust
(+10 maximum / -10 minimum)

Balance

Press **AUDIO** until **BAL** appears
Press **VOLUME** ▼ **(LEFT)** or ▲ **(RIGHT)** to adjust
(BAL 10L/BAL 10R) L=R represents equal balance.

Fader

Press **AUDIO** until **FAD** appears
Press **VOLUME** ▼ **(FRONT)** or ▲ **(REAR)** to adjust
(FAD 10F/FAD 10R) F=R represents equal balance.

Tuner Operation

Seek Tuning	Press **TUNE** ≪ or ≫ momentarily to seek the next strong station.
Manual Tuning	Press **TUNE** ≪ or ≫ for more than 2 seconds, then release. "MANUAL" will momentarily appear in the display. Press **TUNE** ≪ or ≫ momentarily to move radio frequency up or down one step at a time. Press and hold to advance quickly. If tuning is not adjusted for 5 seconds, the unit will return to seek tuning mode (default). "AUTO" will momentarily appear in the display.
Scan Tuning	Press **SCAN** to preview strong stations on the current band, pausing for 5 seconds at each. Press **SCAN** again to cancel.
FM Mono/Stereo	Press **MONO** during FM tuner operation to select mono or stereo (default) reception of the broadcast signal.
Local/Distance	Press **LOC** to activate local tuning for strong station reception only. Press **LOC** again to cancel and resume Distance tuning (default).
Band	Press **BAND** to select between FM1, FM2, FM3 and AM bands.
Frequency Spacing	A switch on the bottom of the chassis selects between US/European **FREQUENCY SPACING**. After changing the switch position, press **RESET** to activate the change.
Storing and Recalling Station Presets	Up to 18 FM stations and 6 AM stations can be stored. To store a station, select the desired band and station. Press and hold the desired preset button for more than 2 seconds. When stored, the preset number will appear in the display. The station can be recalled anytime by pressing the corresponding preset button.
Automatically Store Stations	Press **AS/PS** for more than 2 seconds to automatically store the six strongest stations in the current band.
Preset Scan	Press **AS/PS** for less than 2 seconds to scan presets 1-6 on the current band, pausing for 5 seconds at each. Press **AS/PS** again to cancel.

CD Player Operation

Insert CD	With the label facing up, insert a standard 5" CD into the CD slot. The CD will automatically begin playback.
Eject CD	Press the **EJECT** button to stop and eject the CD. The unit will change to previous mode of operation (tuner or auxiliary input). If the disc is not removed within 10 seconds, the unit will reload the disc.
Track Select	Press **TRACK** ⏫ to skip to the beginning of the next track. Press **TRACK** ⏬ to return to the beginning of the current track. Pressing **TRACK** ⏬ again skips to the beginning of the previous track.
Fast Forward and Reverse	Press and hold **TRACK** ⏫ or **TRACK** ⏬ to fast forward or reverse a track.
Pause	Press **PAUSE** to temporarily stop CD playback. Press **PAUSE** again to resume playback.
Scan	Press **SCN** to play the first 10 seconds of each track. Press **SCN, RPT** or **SHF** to cancel.
Repeat	Press **RPT** to continuously repeat selected track. Press **RPT, SHF** or **SCN** to cancel.
Shuffle	Press **SHF** to play all tracks in random order. Press **SHF, SCN** or **RPT** to cancel.
CD-R Compatibility	Some CD-Rs may be incompatible with this unit, depending on media type and recording method. This model does not support CD-RWs.

Limited One-Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Namsung America Inc. warrants this product to the original purchaser to be free from defects in material and workmanship, under normal conditions, for a period of one year from the date of the original purchase.

Namsung America agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new or renewed product in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase.

During the One-Year Warranty Period: For One Year from the date of purchase, your product will be replaced with a new, renewed or comparable product (whichever is deemed necessary) if it becomes defective or inoperative. This is done without charge to you. Replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A., in the 48 contiguous states ONLY.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product.

What to do? If the product requires warranty service, you must prepay the initial shipping charges. DUAL will pay the return shipping charges if the product is returned to an address within the USA.

Namsung America Inc.
Attn: Returns Center
21318 64th Ave. South
Kent, WA 98032 U.S.A.
Toll Free: 1-866-626-7863

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.

Specifications

CD Player	Signal-to-noise: **>86dB** Frequency response: **20Hz-20kHz, ±3dB** Channel separation @ 1kHz: **>65dB** D/A converter: **1 Bit**
FM Tuner	Tuning range: **87.5MHz-107.9MHz** FM mono sensitivity: **12dBf** 50dB quieting sensitivity (stereo): **16dBf** Stereo separation @ 1kHz: **40dB** Frequency response: **30Hz-13kHz, ±3dB**
AM Tuner	Tuning range: **530kHz-1710kHz** AM sensitivity: **30uV** Frequency response: **80Hz-2kHz, ±3dB**
General	Total system power: **180 Watts Peak** Power output: **45Wx4 @ 14.4 VDC** Power supply: **11-16 VDC, negative ground** Speaker output impedance: **4 ohms** Fuse: **10 amp fast blow ATO** Dimensions: **7" x 7" x 2" (178 x 178 x 51 mm)**

Specifications subject to change without notice

Troubleshooting

Problem	Cause	Action
Unit will not turn on (no power)	Yellow wire not connected or incorrect voltage Red wire not connected or incorrect voltage	Check connections for proper voltage (11~16VDC)
	Black wire not connected	Check connection to ground
	Fuse blown	Replace fuse
Unit has power (but no sound)	Speaker wires not connected	Check connections at speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuses	Yellow or red wire touching chassis ground	Check for pinched wire
	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuse with correct rating
Excessive skipping	Unit is not mounted correctly or backstrap is not secure	Check mounting sleeve and backstrap support
	Physical defect in media (CD or CD-R)	Check media for scratches
Error 1 appears on display	Mechanism error	Press eject or RESET
Error 2 appears on display	Servo error	Press eject or RESET

Namsung America Inc.
21318 64th Ave. South
Kent, WA 98032
Toll Free: 1-866-626-7863

©2003 Namsung America, Inc.
EVOK0603-V01